



RICIN

Agent Overview:

A toxin is a specific product of the metabolic activities of a living organism and is usually very unstable, notably toxic when introduced into the tissues and typically capable of inducing antibody formation. Ricin toxin is produced by the castor bean *Ricinus communis*.

The Delaware Public Health Laboratory (DPHL) can test for Ricin using the Time-resolved fluorescence procedure (TRF) and Real time Polymerase Chain Reaction (RT-PCR) methods.

Lab Specimen Submittal:

Authorization by Dr. Jane Getchell, DPHL director, Christina Pleasanton, DPHL deputy director, or Dr. Jack Liou, bioterrorism coordinator.

Type of specimens Necessary for testing:

Environmental testing:
Plant material, paper, swabs, cotton, polyester (e.g. Dacron), rayon, or foam swab. Wipes, non-cotton gauze, polyester blend (e.g. Handi-Wipes), Powder, water, soil, food and drink.

Packaging instructions:

Environmental specimens must be double bagged and the outside of the bag decontaminated (10% bleach).

Food or Drink specimens must be sent in leak-proof container stored at 2-8°C.

Receiving specimens at DPHL:

Authorized specimens are accepted at the back of the building by the loading dock. Submitter must have ID. Proper forms must be completed.

Handling of Specimens:

Chain of custody procedures must be followed for environmental samples or any samples, specimens and materials that could be used as evidence in a legal proceeding. Environmental samples are kept at room temperature and clinical specimens at refrigerator temperature (in a cooler, but not frozen) until delivered to the laboratory.

Reporting Results:

Preliminary/Presumptive – RT-PCR results are considered preliminary and may take up to four hours after receipt of the specimen.

Confirmation - A positive or negative TRF test result may take up to 24 hours after the sample is received.

Contact Information:

Jane Getchell, DrPH, DPHL director, 302-223-1520 (24/7 coverage).